

Claim Rejections - 35 U.S.C. § 101

Claims 1-4 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter and as not being supported by either a specific asserted utility of a well established unity.

Applicants have amended claims 1, 3, and 4 to explicitly recite the practical of application of the consolidated model. More specifically, Applicants have amended claims 1, 3, and 4 to recite “combining the configuration models into a single, consolidated model that maintains a non-cyclic chain of dependencies among families and features of families for use in answering configuration questions”.

Accordingly, Applicants respectfully request withdrawal of the rejection.

Claim Rejections - 35 U.S.C. § 112

Claims 1-4 stand rejected under 35 U.S.C. § 112, first and second paragraphs. Applicants respectfully traverse the rejections.

I.

I. Applicants have amended claims 1, 3, and 4 to explicitly recite the practical of application of the consolidated model. More specifically, Applicants have amended claims 1, 3, and 4 to recite “combining the configuration models into a single, consolidated model that maintains a non-cyclic chain of dependencies among families and features of families for use in answering configuration questions”.

Accordingly, Applicants respectfully request withdrawal of the rejection.

II.

II. Claims 1-4 also rejected under 35 U.S.C. § 112, second paragraph, because “the limitation in the [independent claim] preamble[s] of “rules having a constraint that references a non-ancestral family of the constraint” can be interpreted to different ways.

Office Action p. 5. Applicants have amended claims 1-4 to delete reference to “a non-ancestral family of the constraint.”

Accordingly, Applicants respectfully request withdrawal of the 35 U.S.C. § 112 based rejections.

Claim Rejections - 35 U.S.C. § 102

Claims 1-4 stand rejected under 35 U.S.C. § 102(b), as being anticipated by U.S. Publication No. 2002/0165701 to Lichtenberg et al. (hereinafter “*Lichtenberg*”). Applicants respectfully traverse the rejection.

Applicants respectfully submit that the claims, as amended, are allowable over *Lichtenberg* because, for example, *Lichtenberg* neither teaches nor suggests:

determining if a conflict exists between at least two of the configuration models, wherein the configuration models are organized in accordance with respective directed acyclic graphs, each configuration model includes at least one ancestor configuration model family and a child configuration model family below the ancestor family, a first conflicting configuration model comprises a configuration model that includes a release of a product that is not released in at least a second conflicting configuration model and the product is defined using the ancestor and child configuration model families;
extending the ancestor family of the product in the first conflicting configuration model to be compatible with second conflicting configuration model; [and]
restricting child family in the first conflicting configuration model so that the child family is not released in the extension of the ancestor family. Claims 1, 3, and 4.

Lichtenberg teaches “obtaining the number of all possible compatible products comprising at least one chosen alternative for each of the products for which an

alternative is chosen and providing this information to the user.” *Lichtenberg*, para. 0062. *Lichtenberg* also teaches “combining two DAGs”. *Lichtenberg*, para. 0076. *Lichtenberg* teaches that, “the step of selecting an alternative may comprise identifying Boolean variables relating to any other alternative(s) of the component and nodes ... [and] in the DAG, identifying paths comprising such nodes.” *Lichtenberg*, para. 0096. “Such paths then may relate directly to “incompatible products” in that these products are no longer interesting.” *Id.* Subsequently, *Lichtenberg* teaches that, “If, during configuration, a selected alternative is not compatible with other, chosen alternatives, the step of checking the DAG may further comprise” *Id.*, para. 0102. “In this situation, the user may choose to actually enter or choose/select the selected alternative and then un-choose the or those alternative(s) which is/are not compatible therewith.” *Id.*, para. 0105.

Thus, Applicants respectfully submit that *Lichtenberg* teaches that during configuration a user’s particular selection can exclude other possible choices. In other words, selection of a particular component can exclude selection of other components.

Applicants respectfully submit that the alternative choices taught by *Lichtenberg* are within a single DAG, whether a combination of other DAGs or not. However, Applicants respectfully submit “obtaining the number of all possible compatible products” and “combining two DAGs” does not teach or suggest “determining if a conflict exists between at least two of the configuration models” as required by claims 1, 3, and 4. (emphasis added).

Applicants respectfully further submit that since *Lichtenberg* does not teach or suggest “determining if a conflict exists between at least two of the configuration models”, *Lichtenberg* also does not teach or suggest:

extending the ancestor family of the product in the first conflicting configuration model to be compatible with second conflicting configuration model; [and]

restricting child family in the first conflicting configuration model so that the child family is not released in the extension of the ancestor family. Claims 1, 3, and 4.

Applicants respectfully request withdrawal of the rejection of claims 1, 3, and 4. Applicants also respectfully request withdrawal of the rejection of claim 2 for at least the same reason as Claim 1.

Applicants respectfully submit that new claims 5-22 are allowable for at least the same reasons as claims 1, 3, and 4.

Regarding the response to Applicants remarks in the previous Office Action, Applicants respectfully disagree with the conclusions drawn in the Office Action. For example, the Office Action on page 5 states that “Applicants have themselves addressed the first argument.” “The fact that *Lichtenberg* teaches selection of a particular component can exclude selection of other components shows a conflict was detected and a particular configuration path was chosen in the directed acyclical graphs.” *Id.* Applicants respectfully submit that excluding a selection by selecting a particular component in the context of *Lichtenberg* does not indicate a conflict of the rules. It shows the presence of an ‘exclude’ type rule or the equivalent thereof. A conflict would exist if one rule said to exclude a component and another rule said to include the component. The presence of an ‘exclude’ type rule does not alone indicate a conflict among rules. Thus, Applicants respectfully submit that finding alternatives that are incompatible with other chosen alternatives, as taught in *Lichtenberg* paras. 0102-0105 is a discussion regarding compatibility of alternatives and not about conflict between rules.

Regarding *Lichtenberg*’s teachings and suggestions regarding combining DAGs, Applicants cannot find any teachings or suggestions in *Lichtenberg* that *Lichtenberg* had (or possibly appreciated) the problems of combining two configuration models when “a first conflicting configuration model [that] comprises a configuration model that includes a release of a product that is not released in at least a second conflicting configuration model and the product is defined using the ancestor and child configuration model families.” Claims 1, 3, and 4.

CONCLUSION

In view of the amendments and remarks set forth herein, Applicant respectfully submits that all pending claims are in condition for allowance. Accordingly, Applicant requests that a Notice of Allowance be issued. Nonetheless, should any issues remain that might be subject to resolution through a telephone interview, the Examiner is requested to telephone the undersigned at 512-338-9100.

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Respectfully submitted,

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